Brown County, South Dakota
Nontechnical Soil Descriptions

Ab – Aberdeen–Nahon Silty Clay Loams

Ab ABERDEEN–NAHON SILTY CLAY LOAMS – The Aberdeen series consists of very deep, moderately well drained soils formed in glacial lacustrine sediments on lake plains. Permeability is slow in the solum and moderate to slow in the underlying material. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
Ab ABERDEEN–NAHON SILTY CLAY LOAMS – The Nahon series consists of very deep, moderately well drained and somewhat poorly drained soils formed in clayey glaciolacustrine sediments on lake plains. Permeability is very slow in the subsoil. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

Ac – Aberdeen–Nahon Silty Clay Loams, Sandy Substratum

Ac ABERDEEN–NAHON SILTY CLAY LOAMS, SANDY SUBSTRATUM – The Aberdeen series consists of very deep, moderately well drained soils formed in glacial lacustrine sediments on lake plains. Permeability is slow in the solum and moderate to slow in the underlying material. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.
Ac ABERDEEN–NAHON SILTY CLAY LOAMS, SANDY SUBSTRATUM – The Nahon series consists of very deep, moderately well drained and somewhat poorly drained soils formed in clayey glaciolacustrine sediments on lake plains. Permeability is very slow in the subsoil. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.

Ad – Aberdeen–Urban Land Complex

Ad ABERDEEN–URBAN LAND COMPLEX – The Aberdeen series consists of very deep, moderately well drained soils formed in glacial lacustrine sediments on lake plains. Permeability is slow in the solum and moderate to slow in the underlying material. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
Ad ABERDEEN–URBAN LAND COMPLEX – Urban land is land mostly covered by streets, parking lots, buildings, and other structures of urban areas. This soil has available water capacity and organic matter content.

Ar – Arveson Fine Sandy Loam

Ar ARVESON FINE SANDY LOAM – The Arveson series consists of very deep, poorly and very poorly drained soils that formed mostly in loamy glacial lacustrine or outwash sediments on glacial lake and outwash plains. These soils have moderate or moderately rapid permeability in the upper part and rapid in the lower part. This soil has moderate available water capacity and high organic matter content. Flooding is RARE.

BaD – Barnes–Buse Loams, 6 To 15 Percent Slopes

BaD BARNES–BUSE LOAMS, 6 TO 15 PERCENT SLOPES – The Barnes series consists of very deep, well drained, moderate or moderately slowly permeable soils that formed in loamy till. These soils are on till plains and moraines. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
BaD BARNES–BUSE LOAMS, 6 TO 15 PERCENT SLOPES – The Buse series consists of very deep, well drained soils that formed in loamy glacial till on moraines. These soils have moderate and moderately slow permeability. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

BbC – Barnes–Buse–Svea Loams, 1 To 9 Percent Slopes

BbC BARNES–BUSE–SVEA LOAMS, 1 TO 9 PERCENT SLOPES – The Barnes series consists of very deep, well drained, moderate or moderately slowly permeable soils that formed in loamy till. These soils are on till plains and moraines. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
BbC BARNES–BUSE–SVEA LOAMS, 1 TO 9 PERCENT SLOPES – The Buse series consists of very deep, well drained soils that formed in loamy glacial till on moraines. These soils have moderate and moderately slow permeability. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
BbC BARNES–BUSE–SVEA LOAMS, 1 TO 9 PERCENT SLOPES – The Svea series consists of deep, well or moderately well drained soils that formed in calcareous glacial till and local alluvium from the till. Permeability is moderate in the solum and moderate or moderately slow in the C horizon. These soils are on concave positions on glacial till plains and have slopes ranging from 0 to 25 percent. This soil has high available water capacity and high organic matter content. Flooding is NONE.

Brown County, South Dakota
Non Technical Soil Descriptions--Continued

BcA – Barnes–Cavour Loams, 0 To 3 Percent Slopes

BcA BARNES–CAVOUR LOAMS, 0 TO 3 PERCENT SLOPES – The Barnes series consists of very deep, well drained, moderate or moderately slowly permeable soils that formed in loamy till. These soils are on till plains and moraines. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
BcA BARNES–CAVOUR LOAMS, 0 TO 3 PERCENT SLOPES – The Cavour series consists of very deep, moderately well and well drained soils formed in glacial till on uplands. The soils have slow or very slow permeability. This soil has moderate available water capacity and high organic matter content. Flooding is NONE.

BcB – Barnes–Cavour Loams, 3 To 6 Percent Slopes

BcB BARNES–CAVOUR LOAMS, 3 TO 6 PERCENT SLOPES – The Barnes series consists of very deep, well drained, moderate or moderately slowly permeable soils that formed in loamy till. These soils are on till plains and moraines. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
BcB BARNES–CAVOUR LOAMS, 3 TO 6 PERCENT SLOPES – The Cavour series consists of very deep, moderately well and well drained soils formed in glacial till on uplands. The soils have slow or very slow permeability. This soil has moderate available water capacity and high organic matter content. Flooding is NONE.

BdA – Barnes–Cresbard–Tonka Complex, 0 To 3 Percent Slopes

BdA BARNES–CRESBARD–TONKA COMPLEX, 0 TO 3 PERCENT SLOPES – The Barnes series consists of very deep, well drained, moderate or moderately slowly permeable soils that formed in loamy till. These soils are on till plains and moraines. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
BdA BARNES–CRESBARD–TONKA COMPLEX, 0 TO 3 PERCENT SLOPES – The Cresbard series consists of very deep, moderately well and well drained soils formed in glacial till, or local alluvium over glacial till in lower backslopes, footslopes, depressions, and flats on uplands. Permeability is slow or moderately slow. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
BdA BARNES–CRESBARD–TONKA COMPLEX, 0 TO 3 PERCENT SLOPES – The Tonka series consists of very deep, poorly drained, slowly permeable soils that formed in local alluvium over glacial till or glaciolacustrine deposits. These soils are in closed basins and depressions on glacial till and glacial lake plains. This soil has high available water capacity and high organic matter content. Flooding is NONE. Ponding duration is LONG.

BdB – Barnes–Cresbard–Tonka Complex, 0 To 6 Percent Slopes

BdB BARNES–CRESBARD–TONKA COMPLEX, 0 TO 6 PERCENT SLOPES – The Barnes series consists of very deep, well drained, moderate or moderately slowly permeable soils that formed in loamy till. These soils are on till plains and moraines. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
BdB BARNES–CRESBARD–TONKA COMPLEX, 0 TO 6 PERCENT SLOPES – The Cresbard series consists of very deep, moderately well and well drained soils formed in glacial till, or local alluvium over glacial till in lower backslopes, footslopes, depressions, and flats on uplands. Permeability is slow or moderately slow. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
BdB BARNES–CRESBARD–TONKA COMPLEX, 0 TO 6 PERCENT SLOPES – The Tonka series consists of very deep, poorly drained, slowly permeable soils that formed in local alluvium over glacial till or glaciolacustrine deposits. These soils are in closed basins and depressions on glacial till and glacial lake plains. This soil has high available water capacity and high organic matter content. Flooding is NONE. Ponding duration is LONG.

BeA – Barnes–Ferney–Tonka Complex, 0 To 4 Percent Slopes

BeA BARNES–FERNEY–TONKA COMPLEX, 0 TO 4 PERCENT SLOPES – The Barnes series consists of very deep, well drained, moderate or moderately slowly permeable soils that formed in loamy till. These soils are on till plains and moraines. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
BeA BARNES–FERNEY–TONKA COMPLEX, 0 TO 4 PERCENT SLOPES – The Ferney series consists of deep, moderately well drained and somewhat poorly drained soils formed in glacial till on uplands. Permeability is very slow. This soil has moderate available water capacity and organic matter content. Flooding is NONE.
BeA BARNES–FERNEY–TONKA COMPLEX, 0 TO 4 PERCENT SLOPES – The Tonka series consists of very deep, poorly drained, slowly permeable soils that formed in local alluvium over glacial till or glaciolacustrine deposits. These soils are in closed basins and depressions on glacial till and glacial lake plains. This soil has high available water capacity and high organic matter content. Flooding is NONE. Ponding duration is LONG.

BfA – Barnes–Hamerly–Tonka Complex

BfA BARNES–HAMERLY–TONKA COMPLEX – The Barnes series consists of very deep, well drained, moderate or moderately slowly permeable soils that formed in loamy till. These soils are on till plains and moraines. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
BfA BARNES–HAMERLY–TONKA COMPLEX – The Hamerly series consists of very deep, somewhat poorly or moderately well drained soils that formed in calcareous loamy glacial till. Permeability is moderate in the upper horizons and moderate or moderately slow in the lower horizons. These soils are on flats on till–floored lake plains and on convex slopes surrounding shallow depressions and on slight rises on till plains. This soil has high available water capacity and high organic matter content. Flooding is NONE.
BfA BARNES–HAMERLY–TONKA COMPLEX – The Tonka series consists of very deep, poorly drained, slowly permeable soils that formed in local alluvium over glacial till or glaciolacustrine deposits. These soils are in closed basins and depressions on glacial till and glacial lake plains. This soil has high available water capacity and high organic matter content. Flooding is NONE. Ponding duration is LONG.

BgC – Barnes–Kranzburg–Buse Complex, 5 To 9 Percent Slopes

BgC BARNES–KRANZBURG–BUSE COMPLEX, 5 TO 9 PERCENT SLOPES – The Barnes series consists of very deep, well drained, moderate or moderately slowly permeable soils that formed in loamy till. These soils are on till plains and moraines. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
BgC BARNES–KRANZBURG–BUSE COMPLEX, 5 TO 9 PERCENT SLOPES – The Kranzburg series consists of very deep, well drained soils formed in silty glacial drift and the underlying glacial till on uplands. Permeability is moderately slow. This soil has high available water capacity and high organic matter content. Flooding is NONE.
BgC BARNES–KRANZBURG–BUSE COMPLEX, 5 TO 9 PERCENT SLOPES – The Buse series consists of very deep, well drained soils that formed in loamy glacial till on moraines. These soils have moderate and moderately slow permeability. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

BhA – Barnes–Svea Loams, 0 To 3 Percent Slopes

BhA BARNES–SVEA LOAMS, 0 TO 3 PERCENT SLOPES – The Barnes series consists of very deep, well drained, moderate or moderately slowly permeable soils that formed in loamy till. These soils are on till plains and moraines. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
BhA BARNES–SVEA LOAMS, 0 TO 3 PERCENT SLOPES – The Svea series consists of deep, well or moderately well drained soils that formed in calcareous glacial till and local alluvium from the till. Permeability is moderate in the solum and moderate or moderately slow in the C horizon. These soils are on concave positions on glacial till plains and have slopes ranging from 0 to 25 percent. This soil has high available water capacity and high organic matter content. Flooding is NONE.

BhB – Barnes–Svea Loams, 1 To 6 Percent Slopes

BhB BARNES–SVEA LOAMS, 1 TO 6 PERCENT SLOPES – The Barnes series consists of very deep, well drained, moderate or moderately slowly permeable soils that formed in loamy till. These soils are on till plains and moraines. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
BhB BARNES–SVEA LOAMS, 1 TO 6 PERCENT SLOPES – The Svea series consists of deep, well or moderately well drained soils that formed in calcareous glacial till and local alluvium from the till. Permeability is moderate in the solum and moderate or moderately slow in the C horizon. These soils are on concave positions on glacial till plains and have slopes ranging from 0 to 25 percent. This soil has high available water capacity and high organic matter content. Flooding is NONE.

BkA – Barnes–Svea–Tonka Complex, 0 To 3 Percent Slopes

BkA BARNES–SVEA–TONKA COMPLEX, 0 TO 3 PERCENT SLOPES – The Barnes series consists of very deep, well drained, moderate or moderately slowly permeable soils that formed in loamy till. These soils are on till plains and moraines. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
BkA BARNES–SVEA–TONKA COMPLEX, 0 TO 3 PERCENT SLOPES – The Svea series consists of deep, well or moderately well drained soils that formed in calcareous glacial till and local alluvium from the till. Permeability is moderate in the solum and moderate or moderately slow in the C horizon. These soils are on concave positions on glacial till plains and have slopes ranging from 0 to 25 percent. This soil has high available water capacity and high organic matter content. Flooding is NONE.
BkA BARNES–SVEA–TONKA COMPLEX, 0 TO 3 PERCENT SLOPES – The Tonka series consists of very deep, poorly drained, slowly permeable soils that formed in local alluvium over glacial till or glaciolacustrine deposits. These soils are in closed basins and depressions on glacial till and glacial lake plains. This soil has high available water capacity and high organic matter content. Flooding is NONE. Ponding duration is LONG.

Brown County, South Dakota
Non Technical Soil Descriptions--Continued

BkB – Barnes–Svea–Tonka Complex, 0 To 6 Percent Slopes
BkB BARNES–SVEA–TONKA COMPLEX, 0 TO 6 PERCENT SLOPES – The Barnes series consists of very deep, well drained, moderate or moderately slowly permeable soils that formed in loamy till. These soils are on till plains and moraines. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
BkB BARNES–SVEA–TONKA COMPLEX, 0 TO 6 PERCENT SLOPES – The Svea series consists of deep, well or moderately well drained soils that formed in calcareous glacial till and local alluvium from the till. Permeability is moderate in the solum and moderate or moderately slow in the C horizon. These soils are on concave positions on glacial till plains and have slopes ranging from 0 to 25 percent. This soil has high available water capacity and high organic matter content. Flooding is NONE.
BkB BARNES–SVEA–TONKA COMPLEX, 0 TO 6 PERCENT SLOPES – The Tonka series consists of very deep, poorly drained, slowly permeable soils that formed in local alluvium over glacial till or glaciolacustrine deposits. These soils are in closed basins and depressions on glacial till and glacial lake plains. This soil has high available water capacity and high organic matter content. Flooding is NONE. Ponding duration is LONG.

BmB – Barnes–Tally Complex, 2 To 6 Percent Slopes

BmB BARNES–TALLY COMPLEX, 2 TO 6 PERCENT SLOPES – The Barnes series consists of very deep, well drained, moderate or moderately slowly permeable soils that formed in loamy till. These soils are on till plains and moraines. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
BmB BARNES–TALLY COMPLEX, 2 TO 6 PERCENT SLOPES – The Tally series consists of very deep, well drained soils that formed in material derived from eolian deposits, alluvium, or glaciofluvial deposits. These soils are on stream terraces, alluvial fans, till plains, drainageways, and outwash plains. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.

BnA – Barnes–Urban Land Complex, 0 To 3 Percent Slopes

BnA BARNES–URBAN LAND COMPLEX, 0 TO 3 PERCENT SLOPES – The Barnes series consists of very deep, well drained, moderate or moderately slowly permeable soils that formed in loamy till. These soils are on till plains and moraines. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
BnA BARNES–URBAN LAND COMPLEX, 0 TO 3 PERCENT SLOPES – Urban land is land mostly covered by streets, parking lots, buildings, and other structures of urban areas. This soil has available water capacity and organic matter content.

Bo – Bearden Silt Loam

Bo BEARDEN SILT LOAM – The Bearden series consists of very deep, somewhat poorly and moderately well drained, moderately to slowly permeable soils that formed in calcareous silt loam and silty clay loam lacustrine sediments. These soils are on glacial lake plains. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

Bp – Bearden Silt Loam, Saline

Bp BEARDEN SILT LOAM, SALINE – The Bearden series consists of very deep, somewhat poorly and moderately well drained, moderately to slowly permeable soils that formed in calcareous silt loam and silty clay loam lacustrine sediments. These soils are on glacial lake plains. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.

BrB – Bearden–Huffton Silt Loams, 1 To 6 Percent Slopes

BrB BEARDEN–HUFFTON SILT LOAMS, 1 TO 6 PERCENT SLOPES – The Bearden series consists of very deep, somewhat poorly and moderately well drained, moderately to slowly permeable soils that formed in calcareous silt loam and silty clay loam lacustrine sediments. These soils are on glacial lake plains. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
BrB BEARDEN–HUFFTON SILT LOAMS, 1 TO 6 PERCENT SLOPES – The Huffton series consists of deep, well drained soils formed in glaciolacustrine sediments on lake plains. Permeability is moderate in the upper part and moderate to slow in the underlying material. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

Brown County, South Dakota
Non Technical Soil Descriptions--Continued

BsB – Bearden–Huffton–Putney Silt Loams, 1 To 4 Percent Slopes

BsB BEARDEN–HUFFTON–PUTNEY SILT LOAMS, 1 TO 4 PERCENT SLOPES – The Bearden series consists of very deep, somewhat poorly and moderately well drained, moderately to slowly permeable soils that formed in calcareous silt loam and silty clay loam lacustrine sediments. These soils are on glacial lake plains. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.
BsB BEARDEN–HUFFTON–PUTNEY SILT LOAMS, 1 TO 4 PERCENT SLOPES – The Huffton series consists of deep, well drained soils formed in glaciolacustrine sediments on lake plains. Permeability is moderate in the upper part and moderate to slow in the underlying material. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
BsB BEARDEN–HUFFTON–PUTNEY SILT LOAMS, 1 TO 4 PERCENT SLOPES – The Putney series consists of deep, well drained soils formed in glaciolacustrine sediments. Permeability is moderate in the subsoil and moderate to slow in the underlying material. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

Bt – Beotia Silt Loam, 0 To 2 Percent Slopes

Bt BEOTIA SILT LOAM, 0 TO 2 PERCENT SLOPES – The Beotia series consists of very deep, well drained or moderately well drained soils formed in silty glaciolacustrine deposits on lake plains. Permeability is moderate in the solum and moderate to slow in the underlying material. This soil has high available water capacity and high organic matter content. Flooding is NONE.

Bv – Beotia–Rondell Silt Loams, 0 To 3 Percent Slopes

Bv BEOTIA–RONDELL SILT LOAMS, 0 TO 3 PERCENT SLOPES – The Beotia series consists of very deep, well drained or moderately well drained soils formed in silty glaciolacustrine deposits on lake plains. Permeability is moderate in the solum and moderate to slow in the underlying material. This soil has high available water capacity and high organic matter content. Flooding is NONE.
Bv BEOTIA–RONDELL SILT LOAMS, 0 TO 3 PERCENT SLOPES – The Rondell series consists of deep, moderately well drained soils formed in glaciolacustrine sediments. Permeability is moderately slow or slow in the subsoil and moderate to slow in the underlying material. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

Bw – Beotia–Urban Land Complex, 0 To 2 Percent Slopes

Bw BEOTIA–URBAN LAND COMPLEX, 0 TO 2 PERCENT SLOPES – The Beotia series consists of very deep, well drained or moderately well drained soils formed in silty glaciolacustrine deposits on lake plains. Permeability is moderate in the solum and moderate to slow in the underlying material. This soil has high available water capacity and high organic matter content. Flooding is NONE.
Bw BEOTIA–URBAN LAND COMPLEX, 0 TO 2 PERCENT SLOPES – Urban land is land mostly covered by streets, parking lots, buildings, and other structures of urban areas. This soil has available water capacity and organic matter content.

Bx – Beotia–Winship Silt Loams

Bx BEOTIA–WINSHIP SILT LOAMS – The Beotia series consists of very deep, well drained or moderately well drained soils formed in silty glaciolacustrine deposits on lake plains. Permeability is moderate in the solum and moderate to slow in the underlying material. This soil has high available water capacity and high organic matter content. Flooding is NONE.
Bx BEOTIA–WINSHIP SILT LOAMS – The Winship series consists of deep, somewhat poorly drained soils formed in silty alluvial deposits and lacustrine sediments on glacial lake plains. Permeability is moderately slow in the solum and moderately slow or slow in the substratum. These soils are in shallow depressions and flat drainageways and This soil has very high available water capacity and high organic matter content. Flooding is NONE.

By – Borup Silt Loam

By BORUP SILT LOAM – The Borup series consists of very deep, poorly and very poorly drained soils that formed in loamy calcareous glacial lacustrine sediments on glacial lake plains. These soils have moderate or moderately rapid permeability. This soil has high available water capacity and high organic matter content. Flooding is RARE.

Bz – Borup Silt Loam, Saline

Bz BORUP SILT LOAM, SALINE – The Borup series consists of very deep, poorly and very poorly drained soils that formed in loamy calcareous glacial lacustrine sediments on glacial lake plains. These soils have moderate or moderately rapid permeability. This soil has moderate available water capacity and high organic matter content. Flooding is RARE.

Brown County, South Dakota
Non Technical Soil Descriptions--Continued

BzGA – Brantford Variant Loam, 0 To 2 Percent Slopes

BzGA BRANTFORD VARIANT LOAM, 0 TO 2 PERCENT SLOPES – The Brantford Variant consists of well drained soils formed in outwash material on outwash plains and terraces. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.

BzHB – Brantford Variant–Vang Loams, 2 To 6 Percent Slopes

BzHB BRANTFORD VARIANT–VANG LOAMS, 2 TO 6 PERCENT SLOPES – The Brantford Variant consists of well drained soils formed in outwash material on outwash plains and terraces. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.
BzHB BRANTFORD VARIANT–VANG LOAMS, 2 TO 6 PERCENT SLOPES – The Vang series consists of very deep, moderately well and well drained soils that formed in loam sediments overlying sand and gravel sediments that have appreciable amounts of shale. Permeability is moderate in the solum and rapid or very rapid in the substratum. These soils are on glacial outwash plains, eskers, terraces, deltas and beaches. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.

BzVE – Buse–Barnes Loams, 9 To 25 Percent Slopes

BzVE BUSE–BARNES LOAMS, 9 TO 25 PERCENT SLOPES – The Buse series consists of very deep, well drained soils that formed in loamy glacial till on moraines. These soils have moderate and moderately slow permeability. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
BzVE BUSE–BARNES LOAMS, 9 TO 25 PERCENT SLOPES – The Barnes series consists of very deep, well drained, moderate or moderately slowly permeable soils that formed in loamy till. These soils are on till plains and moraines. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

Ca – Camtown–Turton Fine Sandy Loams, Somewhat Poorly Drained

Ca CAMTOWN–TURTON FINE SANDY LOAMS, SOMEWHAT POORLY DRAINED – The Camtown series consist of deep, moderately well drained and somewhat poorly drained soils formed in glaciolacustrine sediments on lake plains. Permeability is moderately slow or slow in the subsoil and moderate to slow in the underlying material. This soil has moderate available water capacity and moderate organic matter content. Flooding is FREQ.
Ca CAMTOWN–TURTON FINE SANDY LOAMS, SOMEWHAT POORLY DRAINED – The Turton series consists of deep, moderately well drained and somewhat poorly drained soils formed in loamy glaciolacustrine sediments on lake plains. Permeability is slow in the subsoil and moderate to slow in the underlying material. This soil has high available water capacity and moderate organic matter content. Flooding is FREQ.

Cb – Camtown–Turton Loams

Cb CAMTOWN–TURTON LOAMS – The Camtown series consist of deep, moderately well drained and somewhat poorly drained soils formed in glaciolacustrine sediments on lake plains. Permeability is moderately slow or slow in the subsoil and moderate to slow in the underlying material. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
Cb CAMTOWN–TURTON LOAMS – The Turton series consists of deep, moderately well drained and somewhat poorly drained soils formed in loamy glaciolacustrine sediments on lake plains. Permeability is slow in the subsoil and moderate to slow in the underlying material. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

Cd – Cavour–Cresbard Loams

Cd CAVOUR–CRESBARD LOAMS – The Cavour series consists of very deep, moderately well and well drained soils formed in glacial till on uplands. The soils have slow or very slow permeability. This soil has moderate available water capacity and high organic matter content. Flooding is NONE.
Cd CAVOUR–CRESBARD LOAMS – The Cresbard series consists of very deep, moderately well and well drained soils formed in glacial till, or local alluvium over glacial till in lower backslopes, footslopes, depressions, and flats on uplands. Permeability is slow or moderately slow. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

Brown County, South Dakota
Non Technical Soil Descriptions--Continued

Cf – Cavour–Ferney Complex

Cf CAVOUR–FERNEY COMPLEX – The Cavour series consists of very deep, moderately well and well drained soils formed in glacial till on uplands. The soils have slow or very slow permeability. This soil has moderate available water capacity and high organic matter content. Flooding is NONE.
Cf CAVOUR–FERNEY COMPLEX – The Ferney series consists of deep, moderately well drained and somewhat poorly drained soils formed in glacial till on uplands. Permeability is very slow. This soil has moderate available water capacity and organic matter content. Flooding is NONE.

Cm – Colvin Fine Sandy Loam, Saline

Cm COLVIN FINE SANDY LOAM, SALINE – The Colvin series consists of very deep, poorly and very poorly drained, moderately slow or moderately permeable soils formed in silt loam and silty clay loam sediments. These soils are in concave shallow swales and depressions on glacial lake plains, in outwash channels, on stream terraces and in drainageways on till plains. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.

Cn – Colvin Silty Clay Loam

Cn COLVIN SILTY CLAY LOAM – The Colvin series consists of very deep, poorly and very poorly drained, moderately slow or moderately permeable soils formed in silt loam and silty clay loam sediments. These soils are in concave shallow swales and depressions on glacial lake plains, in outwash channels, on stream terraces and in drainageways on till plains. This soil has high available water capacity and high organic matter content. Flooding is NONE.

Cp – Colvin Silty Clay Loam, Ponded

Cp COLVIN SILTY CLAY LOAM, PONDED – The Colvin series consists of very deep, poorly and very poorly drained, moderately slow or moderately permeable soils formed in silt loam and silty clay loam sediments. These soils are in concave shallow swales and depressions on glacial lake plains, in outwash channels, on stream terraces and in drainageways on till plains. This soil has high available water capacity and high organic matter content. Flooding is RARE. Ponding duration is LONG.

Cs – Colvin Silty Clay Loam, Saline

Cs COLVIN SILTY CLAY LOAM, SALINE – The Colvin series consists of very deep, poorly and very poorly drained, moderately slow or moderately permeable soils formed in silt loam and silty clay loam sediments. These soils are in concave shallow swales and depressions on glacial lake plains, in outwash channels, on stream terraces and in drainageways on till plains. This soil has moderate available water capacity and high organic matter content. Flooding is FREQ.

Cv – Cresbard–Cavour Loams

Cv CRESBARD–CAVOUR LOAMS – The Cresbard series consists of very deep, moderately well and well drained soils formed in glacial till, or local alluvium over glacial till in lower backslopes, footslopes, depressions, and flats on uplands. Permeability is slow or moderately slow. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
Cv CRESBARD–CAVOUR LOAMS – The Cavour series consists of very deep, moderately well and well drained soils formed in glacial till on uplands. The soils have slow or very slow permeability. This soil has moderate available water capacity and high organic matter content. Flooding is NONE.

DaA – Daglum–Rhoades Loams, 0 To 4 Percent Slopes

DaA DAGLUM–RHOADES LOAMS, 0 TO 4 PERCENT SLOPES – The Daglum series consists of deep and very deep, moderately well and well drained soils formed in clayey alluvium or residuum on foot slopes and swales on terraces and uplands. These soils have slow or very slow permeability. This soil has low available water capacity and moderate organic matter content. Flooding is NONE.
DaA DAGLUM–RHOADES LOAMS, 0 TO 4 PERCENT SLOPES – The Rhoades series consists of deep and very deep, well or moderately well drained, very slowly permeable soils formed in stratified loamy and clayey materials derived from saline–alkali soft shale, siltstone or mudstone. These soils are in swales on uplands and terraces. This soil has low available water capacity and moderate organic matter content. Flooding is NONE.

Brown County, South Dakota
Non Technical Soil Descriptions--Continued

Do – Dovray Silty Clay

Do DOVRAY SILTY CLAY – The Dovray series consists of deep poorly and very poorly drained soils that formed in clayey glacial lacustrine sediments or till on glacial lake plains and moraines. These soils have slow and very slow permeability. They have slopes of 0 to 2 percent. This soil has high available water capacity and high organic matter content. Flooding is NONE. Ponding duration is LONG.

Dv – Dovray Variant Silty Clay

Dv DOVRAY VARIANT SILTY CLAY – The Dovray Variant consists of very deep, somewhat poorly drained soils formed in alluvium on flood plains. This soil has moderate available water capacity and high organic matter content. Flooding is RARE.

EcA – Eckman Very Fine Sandy Loam, 0 To 2 Percent Slopes

EcA ECKMAN VERY FINE SANDY LOAM, 0 TO 2 PERCENT SLOPES – The Eckman series consists of deep, well drained, moderately permeable soils that formed in calcareous stratified glaciolacustrine silt loam and very fine sandy loams. These soils are on glacial lake plains and glacial stream terraces and have slopes ranging from 0 to 15 percent. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

EdB – Eckman–Gardena Very Fine Sandy Loams, 2 To 6 Percent Slopes

EdB ECKMAN–GARDENA VERY FINE SANDY LOAMS, 2 TO 6 PERCENT SLOPES – The Eckman series consists of deep, well drained, moderately permeable soils that formed in calcareous stratified glaciolacustrine silt loam and very fine sandy loams. These soils are on glacial lake plains and glacial stream terraces and have slopes ranging from 0 to 15 percent. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
EdB ECKMAN–GARDENA VERY FINE SANDY LOAMS, 2 TO 6 PERCENT SLOPES – The Gardena series consists of very deep, well drained and moderately well drained, moderately permeable soils that formed in calcareous silty and loamy glaciolacustrine sediments. These soils are on terraces, deltas and glacial lake plains. This soil has very high available water capacity and high organic matter content. Flooding is NONE.

EeB – Eckman–Zell Very Fine Sandy Loams, 1 To 6 Percent Slopes

EeB ECKMAN–ZELL VERY FINE SANDY LOAMS, 1 TO 6 PERCENT SLOPES – The Eckman series consists of deep, well drained, moderately permeable soils that formed in calcareous stratified glaciolacustrine silt loam and very fine sandy loams. These soils are on glacial lake plains and glacial stream terraces and have slopes ranging from 0 to 15 percent. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
EeB ECKMAN–ZELL VERY FINE SANDY LOAMS, 1 TO 6 PERCENT SLOPES – The Zell series consists of very deep, well drained moderately permeable soils formed in glaciolacustrine sediments. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

EgB – Edgeley–Kloten Complex, 1 To 6 Percent Slopes

EgB EDGELEY–KLOTEN COMPLEX, 1 TO 6 PERCENT SLOPES – The Edgeley series consists of moderately deep, well drained, moderately permeable soils that formed in colluvium, till, or glaciofluvial deposits overlying soft shale bedrock, or material weathered from shale bedrock. These soils are on till plains, glaciofluvial plains, or in stream valleys. This soil has low available water capacity and moderate organic matter content. Flooding is NONE.
EgB EDGELEY–KLOTEN COMPLEX, 1 TO 6 PERCENT SLOPES – The Kloten series consists of shallow, well drained, moderately permeable soils that formed in glacial till overlying shale bedrock or material weathered from shale bedrock. These soils are on gently sloping to very steep valley side slopes and upland. This soil has very low available water capacity and moderate organic matter content. Flooding is NONE.

EhA – Egeland Fine Sandy Loam, 0 To 2 Percent Slopes

EhA EGELAND FINE SANDY LOAM, 0 TO 2 PERCENT SLOPES – The Egeland series consists of deep, well drained soils formed in glacial outwash sediments. These soils are on terraces and uplands. They have moderately rapid permeability. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.

Brown County, South Dakota
Non Technical Soil Descriptions--Continued

EkB – Egeland–Embden Fine Sandy Loams, 2 To 6 Percent Slopes

EkB EGELAND–EMBDEN FINE SANDY LOAMS, 2 TO 6 PERCENT SLOPES – The Egeland series consists of deep, well drained soils formed in glacial outwash sediments. These soils are on terraces and uplands. They have moderately rapid permeability. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.
EkB EGELAND–EMBDEN FINE SANDY LOAMS, 2 TO 6 PERCENT SLOPES – The Embden series consists of very deep, well or moderately well drained, moderately rapidly permeable soils that formed in glaciofluvial and glaciolacustrine deposits. These soils are on lake, delta, and outwash plains. This soil has moderate available water capacity and high organic matter content. Flooding is NONE.

Em – Embden Fine Sandy Loam

Em EMBDEN FINE SANDY LOAM – The Embden series consists of very deep, well or moderately well drained, moderately rapidly permeable soils that formed in glaciofluvial and glaciolacustrine deposits. These soils are on lake, delta, and outwash plains. This soil has moderate available water capacity and high organic matter content. Flooding is NONE.

Et – Embden–Tiffany Fine Sandy Loams

Et EMBDEN–TIFFANY FINE SANDY LOAMS – The Embden series consists of very deep, well or moderately well drained, moderately rapidly permeable soils that formed in glaciofluvial and glaciolacustrine deposits. These soils are on lake, delta, and outwash plains. This soil has moderate available water capacity and high organic matter content. Flooding is NONE.
Et EMBDEN–TIFFANY FINE SANDY LOAMS – The Tiffany series consists of very deep, somewhat poorly and poorly drained, moderately or moderately rapidly permeable soils that formed in glacial outwash. These soils are in depressions, basins and concave positions in glaciolacustrine deltas and outwash plains. This soil has moderate available water capacity and high organic matter content. Flooding is NONE. Ponding duration is LONG.

Ex – Exline–Aberdeen–Nahon Silt Loams

Ex EXLINE–ABERDEEN–NAHON SILT LOAMS – The Exline series consists of very deep, somewhat poorly drained or moderately well drained soils formed in lacustrine and alluvial deposits on lake plains and terraces. These soils have very slow permeability. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.
Ex EXLINE–ABERDEEN–NAHON SILT LOAMS – The Aberdeen series consists of very deep, moderately well drained soils formed in glacial lacustrine sediments on lake plains. Permeability is slow in the solum and moderate to slow in the underlying material. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
Ex EXLINE–ABERDEEN–NAHON SILT LOAMS – The Nahon series consists of very deep, moderately well drained and somewhat poorly drained soils formed in clayey glaciolacustrine sediments on lake plains. Permeability is very slow in the subsoil. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

EyA – Exline–Putney Silt Loams, 1 To 4 Percent Slopes

EyA EXLINE–PUTNEY SILT LOAMS, 1 TO 4 PERCENT SLOPES – The Exline series consists of very deep, somewhat poorly drained or moderately well drained soils formed in lacustrine and alluvial deposits on lake plains and terraces. These soils have very slow permeability. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
EyA EXLINE–PUTNEY SILT LOAMS, 1 TO 4 PERCENT SLOPES – The Putney series consists of deep, well drained soils formed in glaciolacustrine sediments. Permeability is moderate in the subsoil and moderate to slow in the underlying material. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

Fe – Ferney–Heil Complex

Fe FERNEY–HEIL COMPLEX – The Ferney series consists of deep, moderately well drained and somewhat poorly drained soils formed in glacial till on uplands. Permeability is very slow. This soil has moderate available water capacity and organic matter content. Flooding is NONE.
Fe FERNEY–HEIL COMPLEX – The Heil series consists of very deep, poorly drained, very slowly permeable soils that formed in clayey, calcareous alluvium. This soil has high available water capacity and moderate organic matter content. Flooding is NONE. Ponding duration is LONG.

Fo – Fordville Loam

Fo FORDVILLE LOAM – The Fordville series consists of very deep, well drained soils formed in loamy sediments that are moderately deep over sand and gravel on outwash plains, terraces, and flood plains. Permeability is moderate in the solum and rapid in the underlying sand and gravel. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.

Brown County, South Dakota
Non Technical Soil Descriptions--Continued

FsA – Forman–Aastad Loams, 0 To 3 Percent Slopes

FsA FORMAN–AASTAD LOAMS, 0 TO 3 PERCENT SLOPES – The Forman series consists of deep, well drained, moderately slowly permeable soils formed in calcareous till. These soils are on till plains. This soil has high available water capacity and high organic matter content. Flooding is NONE.
FsA FORMAN–AASTAD LOAMS, 0 TO 3 PERCENT SLOPES – The Aastad series consists of very deep, moderately well drained soils that formed in calcareous loamy glacial till on till plains and ground moraines. These soils have moderately slow permeability. This soil has high available water capacity and high organic matter content. Flooding is NONE.

FsB – Forman–Aastad Loams, 1 To 6 Percent Slopes

FsB FORMAN–AASTAD LOAMS, 1 TO 6 PERCENT SLOPES – The Forman series consists of deep, well drained, moderately slowly permeable soils formed in calcareous till. These soils are on till plains. This soil has high available water capacity and high organic matter content. Flooding is NONE.
FsB FORMAN–AASTAD LOAMS, 1 TO 6 PERCENT SLOPES – The Aastad series consists of very deep, moderately well drained soils that formed in calcareous loamy glacial till on till plains and ground moraines. These soils have moderately slow permeability. This soil has high available water capacity and high organic matter content. Flooding is NONE.

FtC – Forman–Buse–Aastad Loams, 2 To 9 Percent Slopes

FtC FORMAN–BUSE–AASTAD LOAMS, 2 TO 9 PERCENT SLOPES – The Forman series consists of deep, well drained, moderately slowly permeable soils formed in calcareous till. These soils are on till plains. This soil has high available water capacity and high organic matter content. Flooding is NONE.
FtC FORMAN–BUSE–AASTAD LOAMS, 2 TO 9 PERCENT SLOPES – The Buse series consists of very deep, well drained soils that formed in loamy glacial till on moraines. These soils have moderate and moderately slow permeability. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
FtC FORMAN–BUSE–AASTAD LOAMS, 2 TO 9 PERCENT SLOPES – The Aastad series consists of very deep, moderately well drained soils that formed in calcareous loamy glacial till on till plains and ground moraines. These soils have moderately slow permeability. This soil has high available water capacity and high organic matter content. Flooding is NONE.

Fy – Fossum Fine Sandy Loam

Fy FOSSUM FINE SANDY LOAM – The Fossum series consists of very deep, poorly and very poorly drained soils that formed in calcareous sandy glacial lacustrine or outwash sediments on lake and outwash plains. These soils have rapid permeability. This soil has low available water capacity and moderate organic matter content. Flooding is RARE.

Ga – Gardena Very Fine Sandy Loam

Ga GARDENA VERY FINE SANDY LOAM – The Gardena series consists of very deep, well drained and moderately well drained, moderately permeable soils that formed in calcareous silty and loamy glaciolacustrine sediments. These soils are on terraces, deltas and glacial lake plains. This soil has very high available water capacity and high organic matter content. Flooding is NONE.

Gc – Gardena–Glyndon Silt Loams

Gc GARDENA–GLYNDON SILT LOAMS – The Gardena series consists of very deep, well drained and moderately well drained, moderately permeable soils that formed in calcareous silty and loamy glaciolacustrine sediments. These soils are on terraces, deltas and glacial lake plains. This soil has very high available water capacity and high organic matter content. Flooding is NONE.
Gc GARDENA–GLYNDON SILT LOAMS – The Glyndon series consists of very deep, moderately well and somewhat poorly drained soils that formed in silty glacial lacustrine sediments and delta sediments on glacial lake plains. They have moderate permeability in the upper part and moderately rapid permeability in the lower part. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

Gh – Gardena–Turton Very Fine Sandy Loams

Gh GARDENA–TURTON VERY FINE SANDY LOAMS – The Gardena series consists of very deep, well drained and moderately well drained, moderately permeable soils that formed in calcareous silty and loamy glaciolacustrine sediments. These soils are on terraces, deltas and glacial lake plains. This soil has very high available water capacity and high organic matter content. Flooding is NONE.
Gh GARDENA–TURTON VERY FINE SANDY LOAMS – The Turton series consists of deep, moderately well drained and somewhat poorly drained soils formed in loamy glaciolacustrine sediments on lake plains. Permeability is slow in the subsoil and moderate to slow in the underlying material. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

Brown County, South Dakota
Non Technical Soil Descriptions--Continued

Gm − Glyndon Silt Loam

Gm GLYNDON SILT LOAM − The Glyndon series consists of very deep, moderately well and somewhat poorly drained soils that formed in silty glacial lacustrine sediments and delta sediments on glacial lake plains. They have moderate permeability in the upper part and moderately rapid permeability in the lower part. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

Gn − Glyndon Silt Loam, Saline

Gn GLYNDON SILT LOAM, SALINE − The Glyndon series consists of very deep, moderately well and somewhat poorly drained soils that formed in silty glacial lacustrine sediments and delta sediments on glacial lake plains. They have moderate permeability in the upper part and moderately rapid permeability in the lower part. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.

GrA − Great Bend Silt Loam, 0 To 2 Percent Slopes

GrA GREAT BEND SILT LOAM, 0 TO 2 PERCENT SLOPES − The Great Bend series consists of very deep, well drained soils formed in glaciolacustrine sediments on lake plains. Permeability is moderate in the solum and moderate to slow in the underlying material. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

GsB − Great Bend−Beotia Silt Loams, 2 To 6 Percent Slopes

GsB GREAT BEND−BEOTIA SILT LOAMS, 2 TO 6 PERCENT SLOPES − The Great Bend series consists of very deep, well drained soils formed in glaciolacustrine sediments on lake plains. Permeability is moderate in the solum and moderate to slow in the underlying material. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
GsB GREAT BEND−BEOTIA SILT LOAMS, 2 TO 6 PERCENT SLOPES − The Beotia series consists of very deep, well drained or moderately well drained soils formed in silty glaciolacustrine deposits on lake plains. Permeability is moderate in the solum and moderate to slow in the underlying material. This soil has high available water capacity and high organic matter content. Flooding is NONE.

GtA − Great Bend−Putney Silt Loams, 0 To 2 Percent Slopes

GtA GREAT BEND−PUTNEY SILT LOAMS, 0 TO 2 PERCENT SLOPES − The Great Bend series consists of very deep, well drained soils formed in glaciolacustrine sediments on lake plains. Permeability is moderate in the solum and moderate to slow in the underlying material. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
GtA GREAT BEND−PUTNEY SILT LOAMS, 0 TO 2 PERCENT SLOPES − The Putney series consists of deep, well drained soils formed in glaciolacustrine sediments. Permeability is moderate in the subsoil and moderate to slow in the underlying material. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

GyB − Great Bend−Zell Silt Loams, 2 To 6 Percent Slopes

GyB GREAT BEND−ZELL SILT LOAMS, 2 TO 6 PERCENT SLOPES − The Great Bend series consists of very deep, well drained soils formed in glaciolacustrine sediments on lake plains. Permeability is moderate in the solum and moderate to slow in the underlying material. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
GyB GREAT BEND−ZELL SILT LOAMS, 2 TO 6 PERCENT SLOPES − The Zell series consists of very deep, well drained moderately permeable soils formed in glaciolacustrine sediments. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

GyC − Great Bend−Zell Silt Loams, 4 To 9 Percent Slopes

GyC GREAT BEND−ZELL SILT LOAMS, 4 TO 9 PERCENT SLOPES − The Great Bend series consists of very deep, well drained soils formed in glaciolacustrine sediments on lake plains. Permeability is moderate in the solum and moderate to slow in the underlying material. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
GyC GREAT BEND−ZELL SILT LOAMS, 4 TO 9 PERCENT SLOPES − The Zell series consists of very deep, well drained moderately permeable soils formed in glaciolacustrine sediments. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

Brown County, South Dakota
Non Technical Soil Descriptions--Continued

GzC – Great Bend–Zell–Huffton Silt Loams, 4 To 9 Percent Slopes

GzC GREAT BEND–ZELL–HUFFTON SILT LOAMS, 4 TO 9 PERCENT SLOPES – The Great Bend series consists of very deep, well drained soils formed in glaciolacustrine sediments on lake plains. Permeability is moderate in the solum and moderate to slow in the underlying material. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
GzC GREAT BEND–ZELL–HUFFTON SILT LOAMS, 4 TO 9 PERCENT SLOPES – The Zell series consists of very deep, well drained moderately permeable soils formed in glaciolacustrine sediments. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
GzC GREAT BEND–ZELL–HUFFTON SILT LOAMS, 4 TO 9 PERCENT SLOPES – The Huffton series consists of deep, well drained soils formed in glaciolacustrine sediments on lake plains. Permeability is moderate in the upper part and moderate to slow in the underlying material. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

Ha – Hamar Loamy Fine Sand

Ha HAMAR LOAMY FINE SAND – The Hamar series consists of very deep, poorly or somewhat poorly drained soils formed in eolian sand in upland swales and depressions. Permeability is rapid or moderately rapid. This soil has low available water capacity and moderate organic matter content. Flooding is NONE.

Hc – Hamerly Loam

Hc HAMERLY LOAM – The Hamerly series consists of very deep, somewhat poorly or moderately well drained soils that formed in calcareous loamy glacial till. Permeability is moderate in the upper horizons and moderate or moderately slow in the lower horizons. These soils are on flats on till–floored lake plains and on convex slopes surrounding shallow depressions and on slight rises on till plains. This soil has high available water capacity and high organic matter content. Flooding is NONE.

Hd – Hamerly Loam, Saline

Hd HAMERLY LOAM, SALINE – The Hamerly series consists of very deep, somewhat poorly or moderately well drained soils that formed in calcareous loamy glacial till. Permeability is moderate in the upper horizons and moderate or moderately slow in the lower horizons. These soils are on flats on till–floored lake plains and on convex slopes surrounding shallow depressions and on slight rises on till plains. This soil has moderate available water capacity and high organic matter content. Flooding is NONE.

Hf – Hamerly–Tonka Complex

Hf HAMERLY–TONKA COMPLEX – The Hamerly series consists of very deep, somewhat poorly or moderately well drained soils that formed in calcareous loamy glacial till. Permeability is moderate in the upper horizons and moderate or moderately slow in the lower horizons. These soils are on flats on till–floored lake plains and on convex slopes surrounding shallow depressions and on slight rises on till plains. This soil has high available water capacity and high organic matter content. Flooding is NONE.
Hf HAMERLY–TONKA COMPLEX – The Tonka series consists of very deep, poorly drained, slowly permeable soils that formed in local alluvium over glacial till or glaciolacustrine deposits. These soils are in closed basins and depressions on glacial till and glacial lake plains. This soil has high available water capacity and high organic matter content. Flooding is NONE. Ponding duration is LONG.

Hh – Hamerly–Vallers Loams

Hh HAMERLY–VALLERS LOAMS – The Hamerly series consists of very deep, somewhat poorly or moderately well drained soils that formed in calcareous loamy glacial till. Permeability is moderate in the upper horizons and moderate or moderately slow in the lower horizons. These soils are on flats on till–floored lake plains and on convex slopes surrounding shallow depressions and on slight rises on till plains. This soil has high available water capacity and high organic matter content. Flooding is NONE.
Hh HAMERLY–VALLERS LOAMS – The Vallers series consists of deep, poorly drained soils that formed in calcareous loamy glacial till on glacial moraines. These soils have moderately slow permeability. This soil has high available water capacity and high organic matter content. Flooding is RARE.

Hm – Harmony Variant Clay Loam

Hm HARMONY VARIANT CLAY LOAM – The Harmony Variant consists of very deep, moderately well drained soils formed in alluvium on glacial outwash plains. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.

Brown County, South Dakota
Non Technical Soil Descriptions--Continued

Hn – Harmony–Aberdeen Silty Clay Loams

Hn HARMONY–ABERDEEN SILTY CLAY LOAMS – The Harmony series consists of very deep, moderately well drained soils formed in lacustrine sediments on lake plains. Permeability is moderately slow in the solum and slow to moderate in the underlying material. This soil has high available water capacity and high organic matter content. Flooding is NONE.
Hn HARMONY–ABERDEEN SILTY CLAY LOAMS – The Aberdeen series consists of very deep, moderately well drained soils formed in glacial lacustrine sediments on lake plains. Permeability is slow in the solum and moderate to slow in the underlying material. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

Hp – Harmony–Beotia Silt Loams

Hp HARMONY–BEOTIA SILT LOAMS – The Harmony series consists of very deep, moderately well drained soils formed in lacustrine sediments on lake plains. Permeability is moderately slow in the solum and slow to moderate in the underlying material. This soil has high available water capacity and high organic matter content. Flooding is NONE.
Hp HARMONY–BEOTIA SILT LOAMS – The Beotia series consists of very deep, well drained or moderately well drained soils formed in silty glaciolacustrine deposits on lake plains. Permeability is moderate in the solum and moderate to slow in the underlying material. This soil has high available water capacity and high organic matter content. Flooding is NONE.

Hr – Harriet Loam

Hr HARRIET LOAM – The Harriet series consists of very deep, poorly drained, slowly and very slowly permeable soils that formed in calcareous alluvium. These soils are on low lying flats, terraces, drainageways and bottom lands. This soil has moderate available water capacity and moderate organic matter content. Flooding is OCCAS.

HtB – Hecla–Hamar Loamy Fine Sands, 0 To 6 Percent Slopes

HtB HECLA–HAMAR LOAMY FINE SANDS, 0 TO 6 PERCENT SLOPES – The Hecla series consists of deep, moderately well drained soils formed in sandy sediments on lake plains and glacial outwash plains. Permeability is moderately rapid or rapid. This soil has low available water capacity and low organic matter content. Flooding is NONE.
HtB HECLA–HAMAR LOAMY FINE SANDS, 0 TO 6 PERCENT SLOPES – The Hamar series consists of very deep, poorly or somewhat poorly drained soils formed in eolian sand in upland swales and depressions. Permeability is rapid or moderately rapid. This soil has low available water capacity and moderate organic matter content. Flooding is NONE.

Hx – Heil Silt Loam

Hx HEIL SILT LOAM – The Heil series consists of very deep, poorly drained, very slowly permeable soils that formed in clayey, calcareous alluvium. This soil has high available water capacity and moderate organic matter content. Flooding is NONE. Ponding duration is LONG.

Ka – Koto Loam

Ka KOTO LOAM – The Koto series consists of deep, poorly drained soils formed in glacial outwash sediments over glacial till. Permeability is slow. These soils are in depressions. This soil has high available water capacity and moderate organic matter content. Flooding is OCCAS.

Kh – Koto–Harriet Loams

Kh KOTO–HARRIET LOAMS – The Koto series consists of deep, poorly drained soils formed in glacial outwash sediments over glacial till. Permeability is slow. These soils are in depressions. This soil has high available water capacity and moderate organic matter content. Flooding is OCCAS.
Kh KOTO–HARRIET LOAMS – The Harriet series consists of very deep, poorly drained, slowly and very slowly permeable soils that formed in calcareous alluvium. These soils are on low lying flats, terraces, drainageways and bottom lands. This soil has moderate available water capacity and moderate organic matter content. Flooding is OCCAS.

KkA – Kranzburg–Brookings Silt Loams, 0 To 2 Percent Slopes

KkA KRANZBURG–BROOKINGS SILT LOAMS, 0 TO 2 PERCENT SLOPES – The Kranzburg series consists of very deep, well drained soils formed in silty glacial drift and the underlying glacial till on uplands. Permeability is moderately slow. This soil has high available water capacity and high organic matter content. Flooding is NONE.
KkA KRANZBURG–BROOKINGS SILT LOAMS, 0 TO 2 PERCENT SLOPES – The Brookings series consists of deep, well drained and moderately well drained soils formed in loess over glacial till on upland flats and swales. Permeability is moderate in the upper part and moderate or moderately slow in the glacial till. This soil has high available water capacity and high organic matter content. Flooding is NONE.

Brown County, South Dakota
Non Technical Soil Descriptions--Continued

KrB – Kranzburg–Brookings–Buse Complex, 1 To 6 Percent Slopes

KrB KRANZBURG–BROOKINGS–BUSE COMPLEX, 1 TO 6 PERCENT SLOPES – The Kranzburg series consists of very deep, well drained soils formed in silty glacial drift and the underlying glacial till on uplands. Permeability is moderately slow. This soil has high available water capacity and high organic matter content. Flooding is NONE.
KrB KRANZBURG–BROOKINGS–BUSE COMPLEX, 1 TO 6 PERCENT SLOPES – The Brookings series consists of deep, well drained and moderately well drained soils formed in loess over glacial till on upland flats and swales. Permeability is moderate in the upper part and moderate or moderately slow in the glacial till. This soil has high available water capacity and high organic matter content. Flooding is NONE.
KrB KRANZBURG–BROOKINGS–BUSE COMPLEX, 1 TO 6 PERCENT SLOPES – The Buse series consists of very deep, well drained soils that formed in loamy glacial till on moraines. These soils have moderate and moderately slow permeability. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

Kt – Kratka Loamy Fine Sand

Kt KRATKA LOAMY FINE SAND – The Kratka series consists of very deep poorly or very poorly drained soils that formed in a mantle of sandy glacial lacustrine or outwash sediments over lacustrine sediments or loamy glacial till on glacial lake plains, till–floored glacial lake plains, glacial deltas to former glacial lakes, and moraines. These soils have moderately rapid or rapid permeability in the upper part and moderately rapid to moderately slow permeability in the lower part. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.

La – Ladelle Silt Loam

La LADELLE SILT LOAM – The LaDelle series consists of deep, moderately well drained soils formed in alluvium on terraces and flood plains. Permeability is moderately slow or moderate. This soil has very high available water capacity and moderate organic matter content. Flooding is RARE.

Lc – Ladelle Silt Loam, Channeled

Lc LADELLE SILT LOAM, CHANNELED – The LaDelle series consists of deep, moderately well drained soils formed in alluvium on terraces and flood plains. Permeability is moderately slow or moderate. This soil has high available water capacity and moderate organic matter content. Flooding is OCCAS.

Le – Lamoure Silty Clay Loam

Le LAMOURE SILTY CLAY LOAM – The Lamoure series consists of very deep, somewhat poorly drained or poorly drained soils formed in silty alluvium on flood plains. Permeability is moderate or moderately slow. This soil has high available water capacity and high organic matter content. Flooding is OCCAS.

Lg – La Prairie Loam

Lg LA PRAIRIE LOAM – The La Prairie series consists of very deep, moderately well drained, moderately permeable soil that formed in loamy alluvium. These soils are on terraces, and bottom lands in stream valleys. This soil has high available water capacity and moderate organic matter content. Flooding is OCCAS.

Lh – La Prairie–Harriet Loams

Lh LA PRAIRIE–HARRIET LOAMS – The La Prairie series consists of very deep, moderately well drained, moderately permeable soil that formed in loamy alluvium. These soils are on terraces, and bottom lands in stream valleys. This soil has high available water capacity and moderate organic matter content. Flooding is OCCAS.
Lh LA PRAIRIE–HARRIET LOAMS – The Harriet series consists of very deep, poorly drained, slowly and very slowly permeable soils that formed in calcareous alluvium. These soils are on low lying flats, terraces, drainageways and bottom lands. This soil has moderate available water capacity and moderate organic matter content. Flooding is OCCAS.

Brown County, South Dakota
Non Technical Soil Descriptions--Continued

Lm – Letcher–Embden–Miranda Complex

Lm LETCHER–EMBDEN–MIRANDA COMPLEX – The Letcher series consists of deep, somewhat poorly or moderately well drained soils formed in glacial outwash sediments and in loamy glacial till on uplands. Permeability is slow in the solum and moderate or moderately rapid in the underlying material. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.
Lm LETCHER–EMBDEN–MIRANDA COMPLEX – The Embden series consists of very deep, well or moderately well drained, moderately rapidly permeable soils that formed in glaciofluvial and glaciolacustrine deposits. These soils are on lake, delta, and outwash plains. This soil has moderate available water capacity and high organic matter content. Flooding is NONE.
Lm LETCHER–EMBDEN–MIRANDA COMPLEX – The Miranda series consists of deep, moderately well and somewhat poorly drained soils formed in glacial till on uplands. Permeability is very slow. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

Lu – Ludden Silty Clay

Lu LUDDEN SILTY CLAY – The Ludden series consists of deep, poorly or very poorly drained, slowly permeable soils that formed in clayey alluvium. These soils are on bottom lands of streams. This soil has high available water capacity and high organic matter content. Flooding is FREQ. Ponding duration is LONG.

Lw – Ludden Silty Clay, Ponded

Lw LUDDEN SILTY CLAY, PONDED – The Ludden series consists of deep, poorly or very poorly drained, slowly permeable soils that formed in clayey alluvium. These soils are on bottom lands of streams. This soil has high available water capacity and high organic matter content. Flooding is FREQ. Ponding duration is LONG.

Lx – Ludden–Ludden, Saline Silty Clays

Lx LUDDEN–LUDDEN, SALINE SILTY CLAYS – The Ludden series consists of deep, poorly or very poorly drained, slowly permeable soils that formed in clayey alluvium. These soils are on bottom lands of streams. This soil has high available water capacity and high organic matter content. Flooding is FREQ. Ponding duration is LONG.
Lx LUDDEN–LUDDEN, SALINE SILTY CLAYS – The Ludden series consists of deep, poorly or very poorly drained, slowly permeable soils that formed in clayey alluvium. These soils are on bottom lands of streams. This soil has moderate available water capacity and high organic matter content. Flooding is FREQ.

Lz – Ludden Silty Clay, Ponded–Water Complex

Lz LUDDEN SILTY CLAY, PONDED–WATER COMPLEX – The Ludden series consists of deep, poorly or very poorly drained, slowly permeable soils that formed in clayey alluvium. These soils are on bottom lands of streams. This soil has high available water capacity and high organic matter content. Flooding is FREQ. Ponding duration is LONG.
Lz LUDDEN SILTY CLAY, PONDED–WATER COMPLEX – These are areas of water that are normally less than 40 acres in size. This soil has available water capacity and organic matter content.

MaB – Maddock–Hecla–Hamar Loamy Fine Sands, 2 To 8 Percent Slopes

MaB MADDOCK–HECLA–HAMAR LOAMY FINE SANDS, 2 TO 8 PERCENT SLOPES – The Maddock series consists of very deep, well drained or somewhat excessively drained, rapidly permeable soils that formed in fine sands deposited by wind or water. These soils are on sandy glaciolacustrine or glaciofluvial, outwash and delta plains. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.
MaB MADDOCK–HECLA–HAMAR LOAMY FINE SANDS, 2 TO 8 PERCENT SLOPES – The Hecla series consists of deep, moderately well drained soils formed in sandy sediments on lake plains and glacial outwash plains. Permeability is moderately rapid or rapid. This soil has low available water capacity and low organic matter content. Flooding is NONE.
MaB MADDOCK–HECLA–HAMAR LOAMY FINE SANDS, 2 TO 8 PERCENT SLOPES – The Hamar series consists of very deep, poorly or somewhat poorly drained soils formed in eolian sand in upland swales and depressions. Permeability is rapid or moderately rapid. This soil has low available water capacity and moderate organic matter content. Flooding is NONE.

Brown County, South Dakota
Non Technical Soil Descriptions--Continued

Na – Nahon–Aberdeen–Exline Silt Loams

Na NAHON–ABERDEEN–EXLINE SILT LOAMS – The Nahon series consists of very deep, moderately well drained and somewhat poorly drained soils formed in clayey glaciolacustrine sediments on lake plains. Permeability is very slow in the subsoil. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
Na NAHON–ABERDEEN–EXLINE SILT LOAMS – The Aberdeen series consists of very deep, moderately well drained soils formed in glacial lacustrine sediments on lake plains. Permeability is slow in the solum and moderate to slow in the underlying material. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
Na NAHON–ABERDEEN–EXLINE SILT LOAMS – The Exline series consists of very deep, somewhat poorly drained or moderately well drained soils formed in lacustrine and alluvial deposits on lake plains and terraces. These soils have very slow permeability. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.

Nc – Nahon–Aberdeen–Exline Silty Clay Loams, Sandy Substratum

Nc NAHON–ABERDEEN–EXLINE SILTY CLAY LOAMS, SANDY SUBSTRATUM – The Nahon series consists of very deep, moderately well drained and somewhat poorly drained soils formed in clayey glaciolacustrine sediments on lake plains. Permeability is very slow in the subsoil. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.
Nc NAHON–ABERDEEN–EXLINE SILTY CLAY LOAMS, SANDY SUBSTRATUM – The Aberdeen series consists of very deep, moderately well drained soils formed in glacial lacustrine sediments on lake plains. Permeability is slow in the solum and moderate to slow in the underlying material. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.
Nc NAHON–ABERDEEN–EXLINE SILTY CLAY LOAMS, SANDY SUBSTRATUM – The Exline series consists of very deep, somewhat poorly drained or moderately well drained soils formed in lacustrine and alluvial deposits on lake plains and terraces. These soils have very slow permeability. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.

NeA – Niobell–Noonan–Williams Loams, 1 To 4 Percent Slopes

NeA NIOBELL–NOONAN–WILLIAMS LOAMS, 1 TO 4 PERCENT SLOPES – The Niobell series consists of very deep, well drained or moderately well drained, slowly permeable soils that formed in glacial till. These soils are on glacial till plains and uplands. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
NeA NIOBELL–NOONAN–WILLIAMS LOAMS, 1 TO 4 PERCENT SLOPES – The Noonan series consists of very deep, well drained or moderately well drained, slowly permeable soils formed in till. These soils are on till plains and uplands. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.
NeA NIOBELL–NOONAN–WILLIAMS LOAMS, 1 TO 4 PERCENT SLOPES – The Williams series consists of very deep, well drained, moderately slow or slowly permeable soils formed in calcareous glacial till. These soils are on glacial till plains and moraines. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

Ng – Nishon Silt Loam

Ng NISHON SILT LOAM – The Nishon series consists of very deep, poorly drained clayey soils that formed in alluvium. These soils are in closed depressions on the till plains. This soil has high available water capacity and organic matter content. Flooding is NONE. Ponding duration is LONG.

Nh – Nishon–Heil Silt Loams

Nh NISHON–HEIL SILT LOAMS – The Nishon series consists of very deep, poorly drained clayey soils that formed in alluvium. These soils are in closed depressions on the till plains. This soil has high available water capacity and organic matter content. Flooding is NONE. Ponding duration is LONG.
Nh NISHON–HEIL SILT LOAMS – The Heil series consists of very deep, poorly drained, very slowly permeable soils that formed in clayey, calcareous alluvium. This soil has high available water capacity and moderate organic matter content. Flooding is NONE. Ponding duration is LONG.

Brown County, South Dakota
Non Technical Soil Descriptions--Continued

No − Noonan−Niobell−Miranda Loams

No NOONAN−NIOBELL−MIRANDA LOAMS − The Noonan series consists of very deep, well drained or moderately well drained, slowly permeable soils formed in till. These soils are on till plains and uplands. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.
No NOONAN−NIOBELL−MIRANDA LOAMS − The Niobell series consists of very deep, well drained or moderately well drained, slowly permeable soils that formed in glacial till. These soils are on glacial till plains and uplands. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
No NOONAN−NIOBELL−MIRANDA LOAMS − The Miranda series consists of deep, moderately well and somewhat poorly drained soils formed in glacial till on uplands. Permeability is very slow. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

Og − Orthents, Gravelly

Og ORTHENTS, GRAVELLY − Orthents, loamy where 1 or more feet of soil material was removed. Most areas have had 6 to 8 inches of topsoil replaced. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

Ot − Orthents, Loamy

Ot ORTHENTS, LOAMY − Orthents, loamy where 1 or more feet of soil material was removed. Most areas have had 6 to 8 inches of topsoil replaced. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

Pa − Parnell Silty Clay Loam

Pa PARNELL SILTY CLAY LOAM − The Parnell series consists of very deep, very poorly drained and poorly drained soils that formed in clayey water−sorted sediments from glacial drift in depressions, swales and drainageways on glacial moraines. These soils have slow permeability. This soil has high available water capacity and high organic matter content. Flooding is NONE. Ponding duration is LONG.

Pc − Parnell Silty Clay Loam, Ponded

Pc PARNELL SILTY CLAY LOAM, PONDED − The Parnell series consists of very deep, very poorly drained and poorly drained soils that formed in clayey water−sorted sediments from glacial drift in depressions, swales and drainageways on glacial moraines. These soils have slow permeability. This soil has high available water capacity and high organic matter content. Flooding is NONE. Ponding duration is LONG.

PeA − Peever Clay Loam, 0 To 2 Percent Slopes

PeA PEEVER CLAY LOAM, 0 TO 2 PERCENT SLOPES − The Peever series consists of deep, well drained soils on uplands. Permeability is moderately slow or slow. These soils form in fine textured glacial till. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.

PfB − Peever−Buse Clay Loams, 1 To 4 Percent Slopes

PfB PEEVER−BUSE CLAY LOAMS, 1 TO 4 PERCENT SLOPES − The Peever series consists of deep, well drained soils on uplands. Permeability is moderately slow or slow. These soils form in fine textured glacial till. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.
PfB PEEVER−BUSE CLAY LOAMS, 1 TO 4 PERCENT SLOPES − The Buse series consists of very deep, well drained soils that formed in loamy glacial till on moraines. These soils have moderate and moderately slow permeability. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

Pg − Pits, Gravel

Pg PITS, GRAVEL − Orthents, gravelly consists of areas where gravel has been excavated and removed. Some areas have been smoothed and 8 to 14 inches of loamy overburden has been replaced. This soil has low available water capacity and organic matter content. Flooding is NONE.

Pm − Playmoor Silty Clay Loam

Pm PLAYMOOR SILTY CLAY LOAM − The Playmoor series consists of deep, poorly drained soils formed in alluvium on flood plains. Permeability is moderate or moderately slow. This soil has high available water capacity and high organic matter content. Flooding is FREQ.

Brown County, South Dakota
Non Technical Soil Descriptions--Continued

Pr – Playmoor–Lamoure Silty Clay Loams, Channeled

Pr PLAYMOOR–LAMOURE SILTY CLAY LOAMS, CHANNELED – The Playmoor series consists of deep, poorly drained soils formed in alluvium on flood plains. Permeability is moderate or moderately slow. This soil has high available water capacity and high organic matter content. Flooding is FREQ.
Pr PLAYMOOR–LAMOURE SILTY CLAY LOAMS, CHANNELED – The Lamoure series consists of very deep, somewhat poorly drained or poorly drained soils formed in silty alluvium on flood plains. Permeability is moderate or moderately slow. This soil has high available water capacity and high organic matter content. Flooding is FREQ.

Ra – Ranslo Silty Clay Loam

Ra RANSLO SILTY CLAY LOAM – The Ranslo series consists of deep, somewhat poorly drained soils formed in clayey alluvium. These soils are on stream terraces and flood plains. Permeability is slow in the solum and slow to moderate in the underlying material. This soil has moderate available water capacity and high organic matter content. Flooding is OCCAS.

Rc – Ranslo–Harriet Loams

Rc RANSLO–HARRIET LOAMS – The Ranslo series consists of deep, somewhat poorly drained soils formed in clayey alluvium. These soils are on stream terraces and flood plains. Permeability is slow in the solum and slow to moderate in the underlying material. This soil has high available water capacity and high organic matter content. Flooding is OCCAS.
Rc RANSLO–HARRIET LOAMS – The Harriet series consists of very deep, poorly drained, slowly and very slowly permeable soils that formed in calcareous alluvium. These soils are on low lying flats, terraces, drainageways and bottom lands. This soil has moderate available water capacity and moderate organic matter content. Flooding is OCCAS.

RfA – Renshaw–Fordville Loams, 0 To 2 Percent Slopes

RfA RENSHAW–FORDVILLE LOAMS, 0 TO 2 PERCENT SLOPES – The Renshaw series consists of very deep, somewhat excessively drained soils formed in loamy sediments and the underlying sand and gravel on outwash plains, terraces, and flood plains. Permeability is rapid or very rapid. This soil has low available water capacity and moderate organic matter content. Flooding is NONE.
RfA RENSHAW–FORDVILLE LOAMS, 0 TO 2 PERCENT SLOPES – The Fordville series consists of very deep, well drained soils formed in loamy sediments that are moderately deep over sand and gravel on outwash plains, terraces, and flood plains. Permeability is moderate in the solum and rapid in the underlying sand and gravel. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.

RfB – Renshaw–Fordville Loams, 2 To 6 Percent Slopes

RfB RENSHAW–FORDVILLE LOAMS, 2 TO 6 PERCENT SLOPES – The Renshaw series consists of very deep, somewhat excessively drained soils formed in loamy sediments and the underlying sand and gravel on outwash plains, terraces, and flood plains. Permeability is rapid or very rapid. This soil has low available water capacity and moderate organic matter content. Flooding is NONE.
RfB RENSHAW–FORDVILLE LOAMS, 2 TO 6 PERCENT SLOPES – The Fordville series consists of very deep, well drained soils formed in loamy sediments that are moderately deep over sand and gravel on outwash plains, terraces, and flood plains. Permeability is moderate in the solum and rapid in the underlying sand and gravel. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.

Ry – Ryan–Ludden Complex

Ry RYAN–LUDDEN COMPLEX – The Ryan series consists of very deep, poorly drained, very slowly permeable soils that formed in alkaline clayey sediments. These soils are on stream terraces and glacial lake plains. This soil has moderate available water capacity and moderate organic matter content. Flooding is OCCAS. Ponding duration is LONG.
Ry RYAN–LUDDEN COMPLEX – The Ludden series consists of deep, poorly or very poorly drained, slowly permeable soils that formed in clayey alluvium. These soils are on bottom lands of streams. This soil has high available water capacity and high organic matter content. Flooding is FREQ. Ponding duration is LONG.

SaD – Serden Fine Sand, 6 To 15 Percent Slopes

SaD SERDEN FINE SAND, 6 TO 15 PERCENT SLOPES – The Serden series consists of deep, excessively drained, rapidly permeable soils that formed in wind worked fine and medium sand. These soils are on lacustrine and outwash plains. This soil has low available water capacity and low organic matter content. Flooding is NONE.

Brown County, South Dakota
Non Technical Soil Descriptions--Continued

ScB – Serden–Hamar–Venlo Loamy Fine Sands, 0 To 6 Percent Slopes

ScB SERDEN–HAMAR–VENLO LOAMY FINE SANDS, 0 TO 6 PERCENT SLOPES – The Serden series consists of deep, excessively drained, rapidly permeable soils that formed in wind worked fine and medium sand. These soils are on lacustrine and outwash plains. This soil has low available water capacity and low organic matter content. Flooding is NONE.
ScB SERDEN–HAMAR–VENLO LOAMY FINE SANDS, 0 TO 6 PERCENT SLOPES – The Hamar series consists of very deep, poorly or somewhat poorly drained soils formed in eolian sand in upland swales and depressions. Permeability is rapid or moderately rapid. This soil has low available water capacity and moderate organic matter content. Flooding is NONE.
ScB SERDEN–HAMAR–VENLO LOAMY FINE SANDS, 0 TO 6 PERCENT SLOPES – The Venlo series consists of very deep, very poorly drained, rapidly permeable soils that formed in glaciofluvial or glaciolacustrine deposits. These soils are in low, basins and swales on delta, outwash and lake plains. This soil has low available water capacity and moderate organic matter content. Flooding is NONE.

Sd – Slickspots

Sd SLICKSPOTS – Slickspots, loamy consists of moderately well drained areas with little or no vegetation. The areas are strongly saline and strongly alkaline. This soil has high available water capacity and very low organic matter content. Flooding is NONE.

Sf – Spottswood–Divide Loams, 0 To 2 Percent Slopes

Sf SPOTTSWOOD–DIVIDE LOAMS, 0 TO 2 PERCENT SLOPES – The Spottswood series consists of very deep, moderately well drained or somewhat poorly drained soils formed in loamy alluvium and the underlying stratified sand and gravel on glacial outwash plains and stream terraces. Permeability is moderate in the upper part of the pedon and rapid in the underlying material. This soil has moderate available water capacity and high organic matter content. Flooding is NONE.
Sf SPOTTSWOOD–DIVIDE LOAMS, 0 TO 2 PERCENT SLOPES – The Divide series consists of very deep, somewhat poorly or moderately well drained soils that formed in loamy sediment over sand and gravel. Permeability is moderate over rapid or very rapid. These soils are on slightly depressed areas in outwash plains, terraces and interbeach areas. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.

Sh – Stirum Fine Sandy Loam

Sh STIRUM FINE SANDY LOAM – The Stirum series consists of very deep, poorly drained and very poorly drained soils on outwash plains, deltas, lake plains, floodplains and adjacent to current lakes. Permeability is moderately slow in the Btn horizon and moderate to rapid below the Btn horizon. These soils formed in glaciofluvial deposits, glaciolacustrine deposits or alluvium. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE. Ponding duration is LONG.

Sn – Stirum–Stirum Variant Loams

Sn STIRUM–STIRUM VARIANT LOAMS – The Stirum series consists of very deep, poorly drained and very poorly drained soils on outwash plains, deltas, lake plains, floodplains and adjacent to current lakes. Permeability is moderately slow in the Btn horizon and moderate to rapid below the Btn horizon. These soils formed in glaciofluvial deposits, glaciolacustrine deposits or alluvium. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE. Ponding duration is LONG.
Sn STIRUM–STIRUM VARIANT LOAMS – This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE. Ponding duration is VERY LONG.

SoA – Swenoda Fine Sandy Loam, 0 To 2 Percent Slopes

SoA SWENODA FINE SANDY LOAM, 0 TO 2 PERCENT SLOPES – The Swenoda series consists of very deep, well drained and moderately well drained soils formed in loamy sediments underlain by silty and loamy sediments on uplands. Permeability is moderately rapid in the upper part and moderate or moderately slow in the underlying material. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

StB – Swenoda–Embden Fine Sandy Loams, 2 To 6 Percent Slopes

StB SWENODA–EMBDEN FINE SANDY LOAMS, 2 TO 6 PERCENT SLOPES – The Swenoda series consists of very deep, well drained and moderately well drained soils formed in loamy sediments underlain by silty and loamy sediments on uplands. Permeability is moderately rapid in the upper part and moderate or moderately slow in the underlying material. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
StB SWENODA–EMBDEN FINE SANDY LOAMS, 2 TO 6 PERCENT SLOPES – The Embden series consists of very deep, well or moderately well drained, moderately rapidly permeable soils that formed in glaciofluvial and glaciolacustrine deposits. These soils are on lake, delta, and outwash plains. This soil has moderate available water capacity and high organic matter content. Flooding is NONE.

Brown County, South Dakota
Non Technical Soil Descriptions--Continued

SvA – Swenoda–Tiffany Variant Fine Sandy Loams, 0 To 3 Percent Slopes
SvA SWENODA–TIFFANY VARIANT FINE SANDY LOAMS, 0 TO 3 PERCENT SLOPES – The Swenoda series consists of very deep, well drained and moderately well drained soils formed in loamy sediments underlain by silty and loamy sediments on uplands. Permeability is moderately rapid in the upper part and moderate or moderately slow in the underlying material. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
SvA SWENODA–TIFFANY VARIANT FINE SANDY LOAMS, 0 TO 3 PERCENT SLOPES – The Tiffany Variant consists of deep, poorly drained soils formed in sandy sediments overlying silty glaciolacustrine sediments on lake plains. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE. Ponding duration is LONG.

SwA – Swenoda–Turton Complex, 0 To 3 Percent Slopes

SwA SWENODA–TURTON COMPLEX, 0 TO 3 PERCENT SLOPES – The Swenoda series consists of very deep, well drained and moderately well drained soils formed in loamy sediments underlain by silty and loamy sediments on uplands. Permeability is moderately rapid in the upper part and moderate or moderately slow in the underlying material. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
SwA SWENODA–TURTON COMPLEX, 0 TO 3 PERCENT SLOPES – The Turton series consists of deep, moderately well drained and somewhat poorly drained soils formed in loamy glaciolacustrine sediments on lake plains. Permeability is slow in the subsoil and moderate to slow in the underlying material. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

SxA – Swenoda–Turton Variant Complex, 0 To 3 Percent Slopes

SxA SWENODA–TURTON VARIANT COMPLEX, 0 TO 3 PERCENT SLOPES – The Swenoda series consists of very deep, well drained and moderately well drained soils formed in loamy sediments underlain by silty and loamy sediments on uplands. Permeability is moderately rapid in the upper part and moderate or moderately slow in the underlying material. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
SxA SWENODA–TURTON VARIANT COMPLEX, 0 TO 3 PERCENT SLOPES – The Turton Variant consists of very deep, somewhat poorly drained soils formed in loamy glaciolacustrine sediments on lake plains. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.

TaB – Tally Fine Sandy Loam, 2 To 6 Percent Slopes

TaB TALLY FINE SANDY LOAM, 2 TO 6 PERCENT SLOPES – The Tally series consists of very deep, well drained soils that formed in material derived from eolian deposits, alluvium, or glaciofluvial deposits. These soils are on stream terraces, alluvial fans, till plains, drainageways, and outwash plains. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.

TeB – Tally–Letcher Fine Sandy Loams, 1 To 6 Percent Slopes

TeB TALLY–LETCHER FINE SANDY LOAMS, 1 TO 6 PERCENT SLOPES – The Tally series consists of very deep, well drained soils that formed in material derived from eolian deposits, alluvium, or glaciofluvial deposits. These soils are on stream terraces, alluvial fans, till plains, drainageways, and outwash plains. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.
TeB TALLY–LETCHER FINE SANDY LOAMS, 1 TO 6 PERCENT SLOPES – The Letcher series consists of deep, somewhat poorly or moderately well drained soils formed in glacial outwash sediments and in loamy glacial till on uplands. Permeability is slow in the solum and moderate or moderately rapid in the underlying material. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.

Tk – Tonka Silt Loam

Tk TONKA SILT LOAM – The Tonka series consists of very deep, poorly drained, slowly permeable soils that formed in local alluvium over glacial till or glaciolacustrine deposits. These soils are in closed basins and depressions on glacial till and glacial lake plains. This soil has high available water capacity and high organic matter content. Flooding is NONE. Ponding duration is LONG.

Tn – Tonka–Nishon Silt Loams

Tn TONKA–NISHON SILT LOAMS – The Tonka series consists of very deep, poorly drained, slowly permeable soils that formed in local alluvium over glacial till or glaciolacustrine deposits. These soils are in closed basins and depressions on glacial till and glacial lake plains. This soil has high available water capacity and high organic matter content. Flooding is NONE. Ponding duration is LONG.
Tn TONKA–NISHON SILT LOAMS – The Nishon series consists of very deep, poorly drained clayey soils that formed in alluvium. These soils are in closed depressions on the till plains. This soil has high available water capacity and organic matter content. Flooding is NONE. Ponding duration is LONG.

Brown County, South Dakota
Non Technical Soil Descriptions--Continued

Tr – Towner–Hecla Loamy Fine Sands

Tr TOWNER–HECLA LOAMY FINE SANDS – The Towner series consists of very deep, well or moderately well drained soils that formed in wind and water deposited sands over glacial till or lacustrine sediments. Permeability is rapid or moderately rapid in the upper part and moderate or moderately slow in the 2Bk and 2C horizons. These soils are on sand–mantled till or glaciolacustrine plains. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.
Tr TOWNER–HECLA LOAMY FINE SANDS – The Hecla series consists of deep, moderately well drained soils formed in sandy sediments on lake plains and glacial outwash plains. Permeability is moderately rapid or rapid. This soil has low available water capacity and low organic matter content. Flooding is NONE.

Tv – Turton–Turton Variant Complex

Tv TURTON–TURTON VARIANT COMPLEX – The Turton series consists of deep, moderately well drained and somewhat poorly drained soils formed in loamy glaciolacustrine sediments on lake plains. Permeability is slow in the subsoil and moderate to slow in the underlying material. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
Tv TURTON–TURTON VARIANT COMPLEX – The Turton Variant consists of very deep, somewhat poorly drained soils formed in loamy glaciolacustrine sediments on lake plains. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.

Un – Ulen Fine Sandy Loam

Un ULEN FINE SANDY LOAM – The Ulen series consists of very deep, somewhat poorly drained and moderately well drained soils that formed in sandy glaciolacustrine deposits on glacial lake plains. Permeability is rapid. This soil has low available water capacity and moderate organic matter content. Flooding is NONE.

Us – Ulen–Stirum Fine Sandy Loams

Us ULEN–STIRUM FINE SANDY LOAMS – The Ulen series consists of very deep, somewhat poorly drained and moderately well drained soils that formed in sandy glaciolacustrine deposits on glacial lake plains. Permeability is rapid. This soil has low available water capacity and moderate organic matter content. Flooding is NONE.
Us ULEN–STIRUM FINE SANDY LOAMS – The Stirum series consists of very deep, poorly drained and very poorly drained soils on outwash plains, deltas, lake plains, floodplains and adjacent to current lakes. Permeability is moderately slow in the Btn horizon and moderate to rapid below the Btn horizon. These soils formed in glaciofluvial deposits, glaciolacustrine deposits or alluvium. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE. Ponding duration is LONG.

Va – Vallers Clay Loam

Va VALLERS CLAY LOAM – The Vallers series consists of deep, poorly drained soils that formed in calcareous loamy glacial till on glacial moraines. These soils have moderately slow permeability. This soil has high available water capacity and high organic matter content. Flooding is RARE.

Vs – Vallers Loam, Saline

Vs VALLERS LOAM, SALINE – The Vallers series consists of deep, poorly drained soils that formed in calcareous loamy glacial till on glacial moraines. These soils have moderately slow permeability. This soil has moderate available water capacity and high organic matter content. Flooding is RARE.

VzC – Vida–Zahl Loams, 6 To 15 Percent Slopes

VzC VIDA–ZAHL LOAMS, 6 TO 15 PERCENT SLOPES – The Vida series consists of very deep, well drained soils that formed in till. These soils are on till plains and hills. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
VzC VIDA–ZAHL LOAMS, 6 TO 15 PERCENT SLOPES – The Zahl series consists of very deep, well drained, moderately slow or slowly permeable soils that formed in calcareous glacial till. These soils are on glacial till plains, moraines and valley side slopes. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

VzE – Vida–Zahl Loams, 9 To 25 Percent Slopes

VzE VIDA–ZAHL LOAMS, 9 TO 25 PERCENT SLOPES – The Vida series consists of very deep, well drained soils that formed in till. These soils are on till plains and hills. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
VzE VIDA–ZAHL LOAMS, 9 TO 25 PERCENT SLOPES – The Zahl series consists of very deep, well drained, moderately slow or slowly permeable soils that formed in calcareous glacial till. These soils are on glacial till plains, moraines and valley side slopes. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

Brown County, South Dakota
Non Technical Soil Descriptions--Continued

W − Water

w WATER − These are areas of water that are normally less than 40 acres in size. This soil has available water capacity and organic matter content.

WaB − Williams Loam, 2 To 6 Percent Slopes

WaB WILLIAMS LOAM, 2 TO 6 PERCENT SLOPES − The Williams series consists of very deep, well drained, moderately slow or slowly permeable soils formed in calcareous glacial till. These soils are on glacial till plains and moraines. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

WbA − Williams−Bowbells Loams, 0 To 3 Percent Slopes

WbA WILLIAMS−BOWBELLS LOAMS, 0 TO 3 PERCENT SLOPES − The Williams series consists of very deep, well drained, moderately slow or slowly permeable soils formed in calcareous glacial till. These soils are on glacial till plains and moraines. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
WbA WILLIAMS−BOWBELLS LOAMS, 0 TO 3 PERCENT SLOPES − The Bowbells series consists of very deep, well and moderately well drained soils formed in glacial till and alluvium from glacial till on glacial till plains and moraines. These soils have moderate permeability in the upper part and moderately slow or slow in the substratum. This soil has high available water capacity and high organic matter content. Flooding is NONE.

WbB − Williams−Bowbells Loams, 1 To 6 Percent Slopes

WbB WILLIAMS−BOWBELLS LOAMS, 1 TO 6 PERCENT SLOPES − The Williams series consists of very deep, well drained, moderately slow or slowly permeable soils formed in calcareous glacial till. These soils are on glacial till plains and moraines. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
WbB WILLIAMS−BOWBELLS LOAMS, 1 TO 6 PERCENT SLOPES − The Bowbells series consists of very deep, well and moderately well drained soils formed in glacial till and alluvium from glacial till on glacial till plains and moraines. These soils have moderate permeability in the upper part and moderately slow or slow in the substratum. This soil has high available water capacity and high organic matter content. Flooding is NONE.

WdA − Williams−Bowbells−Tonka Complex, 0 To 3 Percent Slopes

WdA WILLIAMS−BOWBELLS−TONKA COMPLEX, 0 TO 3 PERCENT SLOPES − The Williams series consists of very deep, well drained, moderately slow or slowly permeable soils formed in calcareous glacial till. These soils are on glacial till plains and moraines. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
WdA WILLIAMS−BOWBELLS−TONKA COMPLEX, 0 TO 3 PERCENT SLOPES − The Bowbells series consists of very deep, well and moderately well drained soils formed in glacial till and alluvium from glacial till on glacial till plains and moraines. These soils have moderate permeability in the upper part and moderately slow or slow in the substratum. This soil has high available water capacity and high organic matter content. Flooding is NONE.
WdA WILLIAMS−BOWBELLS−TONKA COMPLEX, 0 TO 3 PERCENT SLOPES − The Tonka series consists of very deep, poorly drained, slowly permeable soils that formed in local alluvium over glacial till or glaciolacustrine deposits. These soils are in closed basins and depressions on glacial till and glacial lake plains. This soil has high available water capacity and high organic matter content. Flooding is NONE. Ponding duration is LONG.

WdB − Williams−Bowbells−Tonka Complex, 0 To 6 Percent Slopes

WdB WILLIAMS−BOWBELLS−TONKA COMPLEX, 0 TO 6 PERCENT SLOPES − The Williams series consists of very deep, well drained, moderately slow or slowly permeable soils formed in calcareous glacial till. These soils are on glacial till plains and moraines. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
WdB WILLIAMS−BOWBELLS−TONKA COMPLEX, 0 TO 6 PERCENT SLOPES − The Bowbells series consists of very deep, well and moderately well drained soils formed in glacial till and alluvium from glacial till on glacial till plains and moraines. These soils have moderate permeability in the upper part and moderately slow or slow in the substratum. This soil has high available water capacity and high organic matter content. Flooding is NONE.
WdB WILLIAMS−BOWBELLS−TONKA COMPLEX, 0 TO 6 PERCENT SLOPES − The Tonka series consists of very deep, poorly drained, slowly permeable soils that formed in local alluvium over glacial till or glaciolacustrine deposits. These soils are in closed basins and depressions on glacial till and glacial lake plains. This soil has high available water capacity and high organic matter content. Flooding is NONE. Ponding duration is LONG.

Brown County, South Dakota
Non Technical Soil Descriptions--Continued

WfA – Williams–Cavour Loams, 0 To 3 Percent Slopes

WfA WILLIAMS–CAVOUR LOAMS, 0 TO 3 PERCENT SLOPES – The Williams series consists of very deep, well drained, moderately slow or slowly permeable soils formed in calcareous glacial till. These soils are on glacial till plains and moraines. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
WfA WILLIAMS–CAVOUR LOAMS, 0 TO 3 PERCENT SLOPES – The Cavour series consists of very deep, moderately well and well drained soils formed in glacial till on uplands. The soils have slow or very slow permeability. This soil has moderate available water capacity and high organic matter content. Flooding is NONE.

WfB – Williams–Cavour Loams, 3 To 6 Percent Slopes

WfB WILLIAMS–CAVOUR LOAMS, 3 TO 6 PERCENT SLOPES – The Williams series consists of very deep, well drained, moderately slow or slowly permeable soils formed in calcareous glacial till. These soils are on glacial till plains and moraines. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
WfB WILLIAMS–CAVOUR LOAMS, 3 TO 6 PERCENT SLOPES – The Cavour series consists of very deep, moderately well and well drained soils formed in glacial till on uplands. The soils have slow or very slow permeability. This soil has moderate available water capacity and high organic matter content. Flooding is NONE.

WhA – Williams–Cresbard–Tonka Complex, 0 To 3 Percent Slopes

WhA WILLIAMS–CRESBARD–TONKA COMPLEX, 0 TO 3 PERCENT SLOPES – The Williams series consists of very deep, well drained, moderately slow or slowly permeable soils formed in calcareous glacial till. These soils are on glacial till plains and moraines. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
WhA WILLIAMS–CRESBARD–TONKA COMPLEX, 0 TO 3 PERCENT SLOPES – The Cresbard series consists of very deep, moderately well and well drained soils formed in glacial till, or local alluvium over glacial till in lower backslopes, footslopes, depressions, and flats on uplands. Permeability is slow or moderately slow. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
WhA WILLIAMS–CRESBARD–TONKA COMPLEX, 0 TO 3 PERCENT SLOPES – The Tonka series consists of very deep, poorly drained, slowly permeable soils that formed in local alluvium over glacial till or glaciolacustrine deposits. These soils are in closed basins and depressions on glacial till and glacial lake plains. This soil has high available water capacity and high organic matter content. Flooding is NONE. Ponding duration is LONG.

WhB – Williams–Cresbard–Tonka Complex, 0 To 6 Percent Slopes

WhB WILLIAMS–CRESBARD–TONKA COMPLEX, 0 TO 6 PERCENT SLOPES – The Williams series consists of very deep, well drained, moderately slow or slowly permeable soils formed in calcareous glacial till. These soils are on glacial till plains and moraines. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
WhB WILLIAMS–CRESBARD–TONKA COMPLEX, 0 TO 6 PERCENT SLOPES – The Cresbard series consists of very deep, moderately well and well drained soils formed in glacial till, or local alluvium over glacial till in lower backslopes, footslopes, depressions, and flats on uplands. Permeability is slow or moderately slow. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
WhB WILLIAMS–CRESBARD–TONKA COMPLEX, 0 TO 6 PERCENT SLOPES – The Tonka series consists of very deep, poorly drained, slowly permeable soils that formed in local alluvium over glacial till or glaciolacustrine deposits. These soils are in closed basins and depressions on glacial till and glacial lake plains. This soil has high available water capacity and high organic matter content. Flooding is NONE. Ponding duration is LONG.

WnB – Williams–Niobell Loams, 1 To 6 Percent Slopes

WnB WILLIAMS–NIOBELL LOAMS, 1 TO 6 PERCENT SLOPES – The Williams series consists of very deep, well drained, moderately slow or slowly permeable soils formed in calcareous glacial till. These soils are on glacial till plains and moraines. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
WnB WILLIAMS–NIOBELL LOAMS, 1 TO 6 PERCENT SLOPES – The Niobell series consists of very deep, well drained or moderately well drained, slowly permeable soils that formed in glacial till. These soils are on glacial till plains and uplands. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

WrD – Williams–Vida Loams, 6 To 15 Percent Slopes

WrD WILLIAMS–VIDA LOAMS, 6 TO 15 PERCENT SLOPES – The Williams series consists of very deep, well drained, moderately slow or slowly permeable soils formed in calcareous glacial till. These soils are on glacial till plains and moraines. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
WrD WILLIAMS–VIDA LOAMS, 6 TO 15 PERCENT SLOPES – The Vida series consists of very deep, well drained soils that formed in till. These soils are on till plains and hills. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

Brown County, South Dakota
Non Technical Soil Descriptions--Continued

WsC – Williams–Zahl–Bowbells Loams, 1 To 9 Percent Slopes

WsC WILLIAMS–ZAHL–BOWBELLS LOAMS, 1 TO 9 PERCENT SLOPES – The Williams series consists of very deep, well drained, moderately slow or slowly permeable soils formed in calcareous glacial till. These soils are on glacial till plains and moraines. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
WsC WILLIAMS–ZAHL–BOWBELLS LOAMS, 1 TO 9 PERCENT SLOPES – The Zahl series consists of very deep, well drained, moderately slow or slowly permeable soils that formed in calcareous glacial till. These soils are on glacial till plains, moraines and valley side slopes. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
WsC WILLIAMS–ZAHL–BOWBELLS LOAMS, 1 TO 9 PERCENT SLOPES – The Bowbells series consists of very deep, well and moderately well drained soils formed in glacial till and alluvium from glacial till on glacial till plains and moraines. These soils have moderate permeability in the upper part and moderately slow or slow in the substratum. This soil has high available water capacity and high organic matter content. Flooding is NONE.

Wt – Winship–Tonka Silt Loams

Wt WINSHIP–TONKA SILT LOAMS – The Winship series consists of deep, somewhat poorly drained soils formed in silty alluvial deposits and lacustrine sediments on glacial lake plains. Permeability is moderately slow in the solum and moderately slow or slow in the substratum. These soils are in shallow depressions and flat drainageways and This soil has very high available water capacity and high organic matter content. Flooding is NONE.
Wt WINSHIP–TONKA SILT LOAMS – The Tonka series consists of very deep, poorly drained, slowly permeable soils that formed in local alluvium over glacial till or glaciolacustrine deposits. These soils are in closed basins and depressions on glacial till and glacial lake plains. This soil has high available water capacity and high organic matter content. Flooding is NONE. Ponding duration is LONG.

Wy – Wyndmere Fine Sandy Loam

Wy WYNDMERE FINE SANDY LOAM – The Wyndmere series consists of very deep, somewhat poorly drained, moderately rapidly permeable soils formed in calcareous moderately coarse and coarse glaciofluvial and glaciolacustrine deposits. These soils are on delta and glaciolacustrine plains and beach ridges. This soil has moderate available water capacity and high organic matter content. Flooding is NONE.

Wz – Wyndmere–Stirum Fine Sandy Loams

Wz WYNDMERE–STIRUM FINE SANDY LOAMS – The Wyndmere series consists of very deep, somewhat poorly drained, moderately rapidly permeable soils formed in calcareous moderately coarse and coarse glaciofluvial and glaciolacustrine deposits. These soils are on delta and glaciolacustrine plains and beach ridges. This soil has moderate available water capacity and high organic matter content. Flooding is NONE.
Wz WYNDMERE–STIRUM FINE SANDY LOAMS – The Stirum series consists of very deep, poorly drained and very poorly drained soils on outwash plains, deltas, lake plains, floodplains and adjacent to current lakes. Permeability is moderately slow in the Btn horizon and moderate to rapid below the Btn horizon. These soils formed in glaciofluvial deposits, glaciolacustrine deposits or alluvium. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE. Ponding duration is LONG.

ZaD – Zahl–Embden–Wabek Variant Complex, 3 To 15 Percent Slopes

ZaD ZAHL–EMBDEN–WABEK VARIANT COMPLEX, 3 TO 15 PERCENT SLOPES – The Zahl series consists of very deep, well drained, moderately slow or slowly permeable soils that formed in calcareous glacial till. These soils are on glacial till plains, moraines and valley side slopes. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
ZaD ZAHL–EMBDEN–WABEK VARIANT COMPLEX, 3 TO 15 PERCENT SLOPES – The Embden series consists of very deep, well or moderately well drained, moderately rapidly permeable soils that formed in glaciofluvial and glaciolacustrine deposits. These soils are on lake, delta, and outwash plains. This soil has moderate available water capacity and high organic matter content. Flooding is NONE.
ZaD ZAHL–EMBDEN–WABEK VARIANT COMPLEX, 3 TO 15 PERCENT SLOPES – The Wabek Variant consists of excessively drained soils formed in loamy sediments shallow or very shallow over sand and gravel that overlies glacial till on glacial outwash plains. This soil has moderate available water capacity and low organic matter content. Flooding is NONE.

Brown County, South Dakota
Non Technical Soil Descriptions--Continued

ZdE – Zahl–Kloten–Edgeley Complex, 9 To 35 Percent Slopes

ZdE ZAHL–KLOTEN–EDGELEY COMPLEX, 9 TO 35 PERCENT SLOPES – The Zahl series consists of very deep, well drained, moderately slow or slowly permeable soils that formed in calcareous glacial till. These soils are on glacial till plains, moraines and valley side slopes. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
ZdE ZAHL–KLOTEN–EDGELEY COMPLEX, 9 TO 35 PERCENT SLOPES – The Kloten series consists of shallow, well drained, moderately permeable soils that formed in glacial till overlying shale bedrock or material weathered from shale bedrock. These soils are on gently sloping to very steep valley side slopes and upland. This soil has very low available water capacity and moderate organic matter content. Flooding is NONE.
ZdE ZAHL–KLOTEN–EDGELEY COMPLEX, 9 TO 35 PERCENT SLOPES – The Edgeley series consists of moderately deep, well drained, moderately permeable soils that formed in colluvium, till, or glaciofluvial deposits overlying soft shale bedrock, or material weathered from shale bedrock. These soils are on till plains, glaciofluvial plains, or in stream valleys. This soil has low available water capacity and moderate organic matter content. Flooding is NONE.

ZeA – Zell Silt Loam, 0 To 2 Percent Slopes

ZeA ZELL SILT LOAM, 0 TO 2 PERCENT SLOPES – The Zell series consists of very deep, well drained moderately permeable soils formed in glaciolacustrine sediments. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

ZgD – Zell–Great Bend Silt Loams, 6 To 25 Percent Slopes

ZgD ZELL–GREAT BEND SILT LOAMS, 6 TO 25 PERCENT SLOPES – The Zell series consists of very deep, well drained moderately permeable soils formed in glaciolacustrine sediments. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
ZgD ZELL–GREAT BEND SILT LOAMS, 6 TO 25 PERCENT SLOPES – The Great Bend series consists of very deep, well drained soils formed in glaciolacustrine sediments on lake plains. Permeability is moderate in the solum and moderate to slow in the underlying material. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.